#### COMPATIBILITY DETERMINATION

Use: Hunting

**Refuge Name:** Mingo National Wildlife Refuge

**Establishing and Acquisition Authority(ies):** Migratory Bird Conservation Act and Refuge Recreation Act

**Refuge Purpose(s):** For use as an inviolate sanctuary or for any other management purpose, for migratory birds, and for (1) incidental fish and wildlife-orientated recreational development, (2) the protection of natural resources, (3) the conservation of endangered species or threatened species.

In the Wilderness Area, to preserve wilderness character and devote to the public purposes of recreational, scenic, scientific, educational, conservation and historical use as primary refuge objectives permit.

**National Wildlife Refuge System Mission:** "The Mission of the National Wildlife Refuge System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans."

**Description of Use:** This Compatibility Determination updates and supersedes the Compatibility Determination developed concurrently with the refuge's Hunting Plan and authorized in 2014. This Compatibility Determination will allow public hunting for wildlife on Mingo National Wildlife Refuge lands. The refuge is expanding species hunted.

Season dates, bag limits, and harvest methods are consistent with Missouri regulations, except when more restrictive refuge regulations apply. A Refuge Hunting Brochure is available to inform the public of hunting opportunities and refuge regulations. State seasons and limits will apply for all specified species on designated areas of the refuge as follows:

- A. Migratory Game Birds: Waterfowl (ducks and geese)
- B. Upland Game: gray and fox squirrel
- C. Big Game: white-tailed deer and wild turkey

Raccoons and bobcats may be taken incidental to any refuge hunt, during state designated seasons, with weapons legal for that hunt until the daily bag limit of game is taken. Raccoon hunting is also allowed by Special Use Permit. This opportunity will primarily be after the archery deer season, however, Refuge staff can permit this activity anytime during the state raccoon season. Feral hogs may be taken incidental to any refuge hunt, during state designated seasons, with weapons legal for that hunt until the daily bag limit of game is taken. Feral hogs may also be taken during other periods as deemed necessary for population control.

There are four hunting areas on Mingo NWR. The General Hunt Area (8,960 acres) includes the area east of Ditch 4 and north of Ditch 11, the Expanded General Hunt Area (3,689 acres) includes the area west of Ditch 4, east of Ditch 6 and north of Ditch 11, the Managed Hunt Area (8,420 acres) includes the area west of Ditch 4 and north of Ditch 11 and the Special Hunt Area which includes the area north of Bluff Road

Hunting activities allowed on specific refuge hunt areas are as follows:

#### **General Hunt Area**

- Migratory Birds (Ducks and Geese)
  - Open in Pool 7 three days per week until 1:00 p.m.; maximum of 25 hunters
  - Open in Pool 8 seven days per week until 1:00 p.m.; maximum of 50 hunters
  - Hunters must participate in daily draw at Duck Creek Conservation Area to access hunt area.
  - o Non-toxic shot only
- Upland Game (Gray and Fox Squirrel)
  - Open to hunting during state season until the day before the state archery deer season.
  - o Non-toxic shot only
  - o Shotguns and rifles chambered for rim-fire cartridges may be used
  - o Incidental take of squirrels by archery hunters during state season
  - Use of dogs not permitted
- Big Game (White-tailed Deer and Turkey)
  - o Deer open to fall archery hunting during state season
  - o Turkey open to fall archery hunting during state season
  - Turkey open to spring gun hunting during state season including the state youth season for youth hunters
  - Non-toxic shot only for spring turkey hunting
- Incidental take of raccoon and bobcat during the statewide furbearer season
- Incidental take of feral hogs during refuge hunts
- Managed hunt for feral hogs when deemed necessary for population control

## **Expanded General Hunt Area**

- Migratory Birds
  - Closed
- Upland Game (Gray and Fox Squirrel)
  - Open to hunting during state season until the day before the state archery deer season.
  - o Non-toxic shot only
  - o Shotguns and rifles chambered for rimfire cartridges may be used
  - o Incidental take of squirrels by archery hunters during state season
  - Use of dogs not permitted
- Big Game (White-tailed Deer and Turkey)
  - o Deer open to fall archery hunting during state season until October 31st

- o Turkey open to fall archery hunting during state season until October 31st
- o Turkey open to spring gun hunting during state season including the state youth season for youth hunters
- Non-toxic shot only for spring turkey hunting
- Incidental take of raccoon and bobcat during the statewide furbearer season
- Incidental take of feral hogs during refuge hunts
- Managed hunt for feral hogs when deemed necessary for population control

# **Managed Hunt Area**

- Migratory Birds
  - Closed
- Upland Game
  - o Closed
- Big Game (White-tailed Deer)
  - Open to lottery quota muzzleloader hunts
  - o Applicants selected through Missouri Dept. of Conservation draw system
  - Number/type of hunts and number of hunters dependent on deer population objectives
  - o Open to youth lottery gun hunt during state youth weekend
- Incidental take of raccoon and bobcat during the statewide furbearer season
- Incidental take of feral hogs during refuge hunts
- Managed hunt for feral hogs when deemed necessary for population control

### **Special Hunt Area**

- Migratory Birds
  - Closed
- Upland Game
  - o Closed
- Big Game (White-tailed Deer and Turkey)
  - Accessible blinds will be utilized to provide opportunities for disabled/youth/special hunts
  - o Hunt dates will be determined prior to start of the hunting season
  - o Blinds will be filled on a lottery type draw system
  - o Incidental take of feral hogs during refuge hunts
  - o Managed hunt for feral hogs when deemed necessary for population control

The refuge provides managed deer hunts in the Managed Hunt Area. These managed hunts generally utilize muzzleloaders only. The number of hunters allowed fluctuates with deer population estimates. Generally, the hunts consist of approximately 70 – 150 hunters selected by a random drawing conducted by the Missouri Department of Conservation (MDC). Up to 6 wheelchair hunters are also accommodated during these managed hunts in the Special Hunt Area separate from the Managed Hunt Area. Providing access for persons with disabilities and youth to refuge facilities and compatible wildlife-dependent public uses, including hunting, is a high

priority for the refuge. Therefore, the blinds in the Special Hunt Area will also be utilized for additional youth, disabled, or other special hunts during statewide seasons to provide additional opportunities.

A youth gun deer hunt is also allowed in the Managed Hunt Area during the Statewide youth deer hunting weekend. This is also a quota hunt which requires applying through the MDC. Typically, fifty hunters are drawn for this hunt.

If a deemed necessary by Refuge staff, a managed feral hog hunt could take place outside of existing big game seasons. The number of hunters and exact location on the refuge would be set at the time of the hunt, based on hog population estimates, other refuge activities and refuge staff availability. The hunt dates would occur outside of big games seasons for that year on the Refuge. Only firearms approved for use during the Missouri Firearms Deer Hunt will be allowed. A managed hunt would be implemented when resource damage and hog populations are at levels that pose a long-term impact to habitat and native species populations.

**Availability of Resources:** The hunting program is designed to be administered with minimal refuge resources. Refuge regulations mirror State regulations in large part which allows the MDC Conservation Officers to assist in law enforcement. There is a small amount of road maintenance, mowing, and other upkeep performed that is funded as part of regular refuge management activities.

At the present level of hunting use there are adequate refuge resources to implement the hunting program. Law enforcement is the primary tool necessary to ensure proper and safe administration of this use. Mingo NWR currently has a full time Refuge Officer and law enforcement services are available through the Regional Law Enforcement Program and Refuge Officers stationed at other refuges near Mingo NWR. Additionally, the local State Conservation Officers and County Sheriff's Office provide additional assistance when requested.

Hunters use the existing network of roads to access areas open to hunting. Parking lots, boat ramps, restrooms, leaflets, information and sign-in/sign-out kiosks, and signs are provided by the refuge for use by hunters. The refuge also provides staff and volunteers to maintain these facilities and disseminate information to hunters. The Recreational Fee Program is also utilized to cover costs associated with the hunt such as, hunting brochures, road maintenance, and blind maintenance.

Waterfowl hunters are required to attend the daily drawing at the Duck Creek Conservation Area. Since MDC staff performs the drawing, refuge staff time is minimal. However, refuge staff will assist MDC personnel to administer the daily drawing when necessary.

Anticipated Impacts of the Use: Accommodating this wildlife-dependant use is expected to result in minimal impacts. Although hunting causes mortality to wildlife, season dates and bag limits are set with the long-term health of populations in mind. Populations for certain species, for example white-tailed deer, are monitored by refuge staff. Survey information indicates that limited harvest will not adversely affect the overall deer population level. Without harvest, deer will quickly overpopulate an area causing degradation to the quality and quantity of vegetation.

Deer hunting may also reduce the number of deer/car collisions on adjacent roadways. Temporary disturbance to other wildlife may occur during hunting activity.

Waterfowl hunting is allowed in Pool 7 and 8 only. This limits conflicts between waterfowl and deer hunters, plus limits disturbance to migratory birds. Waterfowl hunters may disturb migratory birds and other wildlife as they travel to and from their hunting sites or when retrieving downed birds. Depending on the location and the number of migratory birds in the area, disturbance can be temporary with displaced birds moving to other locations within the hunting area or to nearby closed areas. Disturbance is further minimized in Pool 7 by only allowing hunting three days during the week. Conflicts between hunters competing for prime waterfowl hunting spots can occur in areas where birds concentrate; however limiting the number of hunters using the area depending on water levels and available acreage reduces this concern.

Under current regulations, conflicts with other user groups have been few, because of the designation of the General Hunting Area for hunting uses only and the rest of the refuge open to other user groups, except for Closed Areas. During the managed muzzleloader deer hunts, the 8,420-acre hunt area is closed to other user groups to avoid conflicts and safety concerns. In the Expanded General Hunt Area, other users will not be restricted during the archery deer/turkey season so there may be conflicts between hunters and other user groups. However, the potential for conflict is minimal due to the short hunting season and large area of the hunting unit.

Hunters will be allowed to access the hunt areas through designated entry points only. Vehicles are only allowed on designated roads and must use designated parking areas or areas adjacent to roads for parking. Boats will be allowed in ditches 1, 2, 3, 4, 5, 6, 11, and lateral ditch on southside of Gumstump Pool for access to the hunt areas. However, no boats may be left overnight and must comply with all motor restrictions on the refuge. Hunters will also be allowed to utilize bicycles to access hunt areas. Bicycles must stay on roads at all times.

Public Review and Comment: This compatibility determination is part of an amended Hunt Plan, an Environmental Assessment evaluating hunting (2012) and an Environmental Assessment evaluating hunting of feral hogs (2014). Public notification and review for the previous Hunt Plan, Environmental Assessment (Hunting) and previous Compatibility Determination included a 30-day comment period (September 17 – October 17, 2012), a second comment period (December 13, 2012 – January 4, 2013), and a listening station held on September 25, 2012. News releases announcing the availability of the document for review were sent to numerous local media outlets, conservation organizations, State and local officials, and private landowners. A total of twenty-three comments were received and are addressed in Section 8.0 of the Environmental Assessment.

Public notification and review for the Amended Hunt Plan, Environmental Assessment (Hunting of Feral Hogs) and Compatibility Determination included a 30-day comment period (August 8, 2014 – September 8, 2014) and a listening station held on August 26, 2014. News releases announcing the availability of the document for review were sent to numerous local media outlets, conservation organizations, State and local officials, and private landowners.

Determination:			
	Use is Not Compatible		
X	Use is Compatible with Following Stipulations		

**Stipulations Necessary to Ensure Compatibility:** The following stipulations are required to ensure compatibility:

- 1. This use must be conducted in accordance with State and Federal regulations and special refuge regulations published in the Refuge Hunting Brochure and Public Use Regulations brochures.
- 2. A system of closed areas must be maintained to ensure that migratory birds have adequate resting and feeding areas while hunting seasons are occurring.
- 3. Hunting is subject to modification if on-site monitoring by refuge personnel or other authorized personnel results in unanticipated negative impacts to visitor safety, natural communities, wildlife species, or their habitats.
- 4. Harvest occurs only in populations that can support the removal of individuals.
- 5. Hunting may be more restrictive than State seasons and regulations to ensure compliance with visitor safety and reduce wildlife disturbance.
- 6. Waterfowl hunting is restricted to ½ hour before sunrise until 1:00 p.m. to allow the birds to feed and rest undisturbed. Hunting will be allowed in Pool 7 for three days per week only.
- 7. The yearly flooding of the Pool 7 and 8 waterfowl hunting area will depend on both climatic conditions and management strategies occurring that year. The number of waterfowl hunters allowed in Pool 7 and 8 will be limited according to the water levels and available flooded habitat to regulate the distribution and disturbance of the hunters and still provide resting areas for the birds. Flooding of these waterfowl hunt units will not be determined by hunting season dates but rather by basing flood dates on tree senescence. Long term viability of the forest is a refuge priority and these units will be managed as such.
- 8. The managed muzzleloader deer hunt area and portions of Bluff Road will be closed to other refuge visitors during managed hunts to avoid possible user group conflicts and ensure public safety.
- 9. No motorized ATVs or other vehicles are allowed to be used to aid in hunting.

10. From November 1 to March 1 the area between Ditch 4 and Ditch 6 south of Monopoly Marsh and north of Ditch 11 will be closed to hunting, except during managed hunts, as well as other public uses to provide an area free from wildlife disturbance.

Justification: In view of the above and with the stipulations previously described, hunting will not materially interfere with or detract from the purposes of the refuge or the mission of the Refuge System. Hunting seasons and bag limits are established by the Missouri Department of Conservation and generally adopted by the refuge. These restrictions ensure the continued well-being of overall populations of game animals. Hunting does result in the taking of many individuals within the overall population, but restrictions are designed to safeguard and maintain adequate breeding populations from year to year. Specific refuge regulations address equity and quality of opportunity for hunters, and help safeguard refuge habitat. Disturbance to other fish and wildlife does occur, but this disturbance is generally short-term and adequate habitat occurs in adjacent areas.

The removal of a portion of the deer herd will help control the population at a level to ensure habitat protection from over-browsing and maintain the health of the herd. The deer herd is studied regularly through survey methods and post-mortem examination of harvested deer. To not continue with current harvest rates may cause appreciable damage to refuge habitat. The existing deer population can support the removal of deer by the muzzleloader hunt and still maintain the herd stability and provide a recreational opportunity. Restricting afternoon waterfowl hunting on Pool 7 and 8 provides adequate time for feeding, resting, and social behavior activities.

Conflicts between hunters are localized and are addressed through law enforcement and continuous review and updating to State and refuge hunting regulations. Conflicts between other various user groups are minor given the season of the year for hunting, the location of most hunting away from public use facilities, and the system of administrative closed areas. Currently hunters, bird watchers, wildlife observers, hikers, anglers, and photographers can equally enjoy recreational activities in a safe manner.

The stipulations listed above will ensure proper control of the means of use and provide management flexibility should detrimental impacts develop. Allowing this use also furthers the mission of the National Wildlife Refuge System by providing renewable resources for the benefit of the American public while conserving fish, wildlife, and plant resource on the refuge.

Refuge Manager:		
	(Signature and Date)	
Regional Chief Co	ncurrence:	
	(Signature and Date)	
Mandatory 10- or	15-year Re-evaluation Date:	2025

